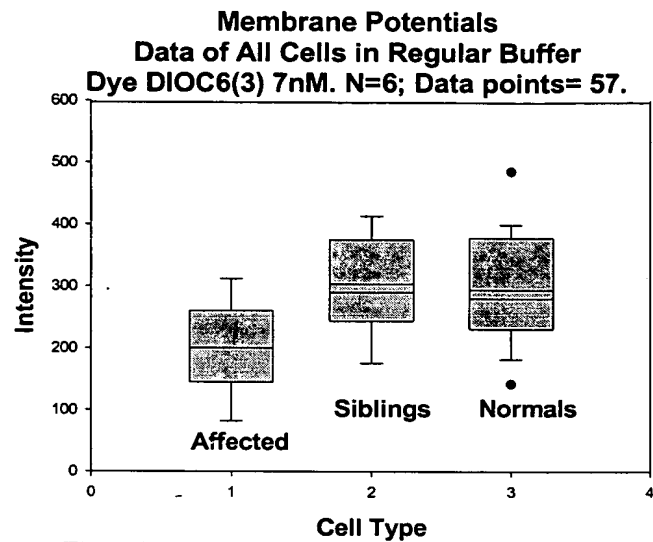


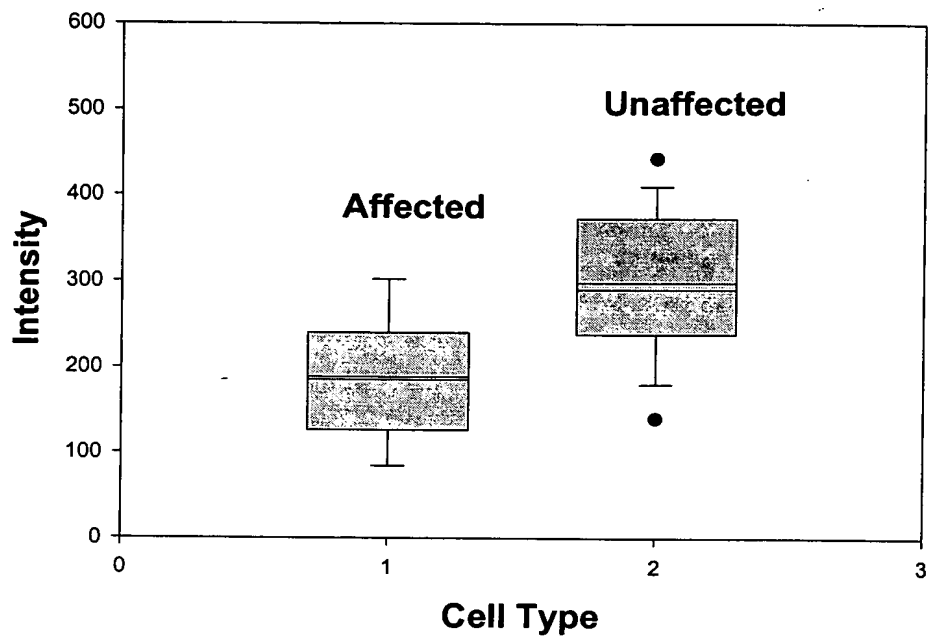
**FIGURE 1**



The differences in the mean values among the groups are greater than would be expected by chance; there is a statistically significant difference ( $P = <0.001$ ).  
Power of performed test with  $\alpha = 0.050$ : 0.991

**FIGURE 2**

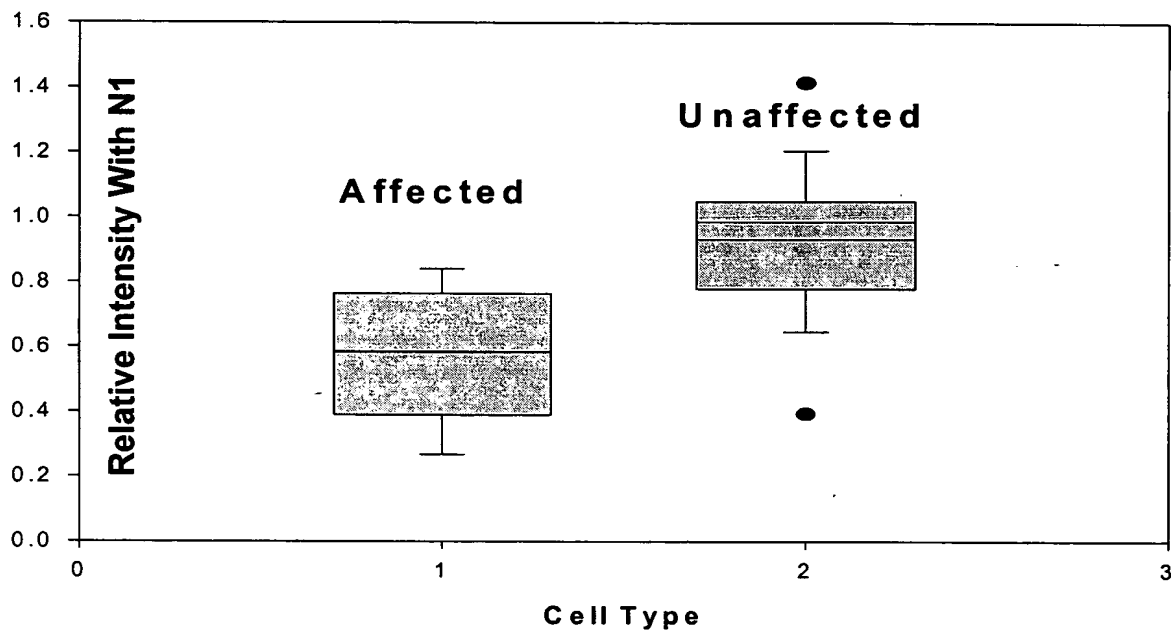
**Membrane Potentials  
Summary Data of All Cells**



95 percent confidence interval for difference of means: -159.577 to -66.090  
The difference in the mean values of the two groups is greater than  
would be expected by chance; there is a statistically significant difference  
between the input groups ( $P = <0.001$ ).  
Power of performed test with  $\alpha = 0.050$ : 0.999

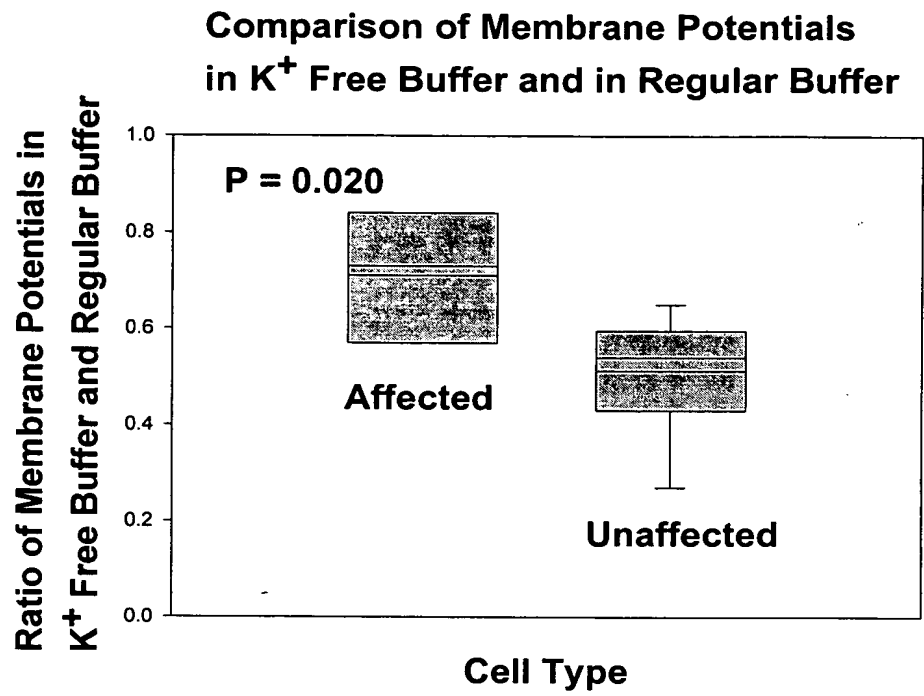
**FIGURE 3**

**Summary of all data**  
**All intensities are relative to Cell N1**  
**RATIO-METRIC METHOD**



**t = -5.386 with 54 degrees of freedom. (P = <0.001)**  
**95 percent confidence interval for difference of means: -0.478 to -0.219**  
**The difference in the mean values of the two groups is greater than**  
**would be expected by chance; there is a statistically significant**  
**difference between the input groups (P = <0.001).**  
**Power of performed test with alpha = 0.050: 1.000**

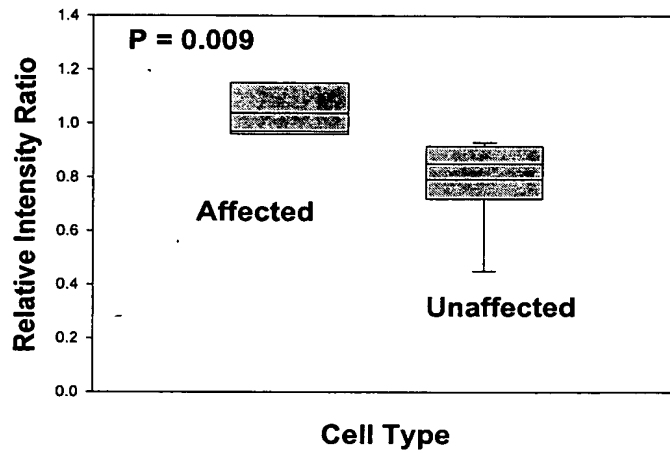
**FIGURE 4**



**FIGURE 5**

**Ethacrynate Induced Changes in Membrane Potential**

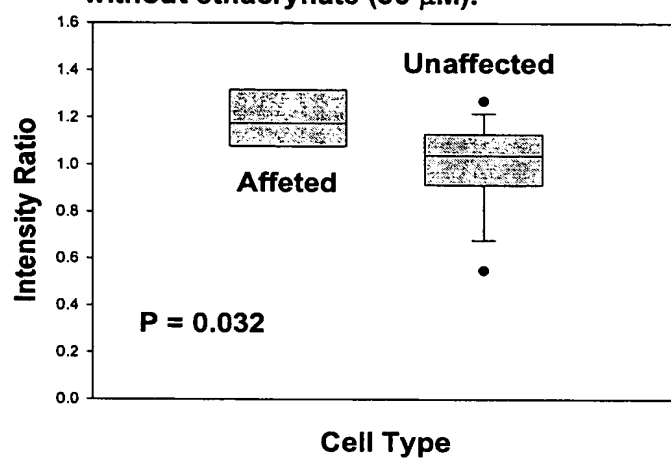
**Cells were incubated for 30 min in presence or absence of ethacrynate in regular buffer or in K<sup>+</sup> free buffer.**



**Relative Intensity Ratio = Intensity Ratio in K<sup>+</sup> Free Buffer /  
Intensity Ratio in Regular Buffer**

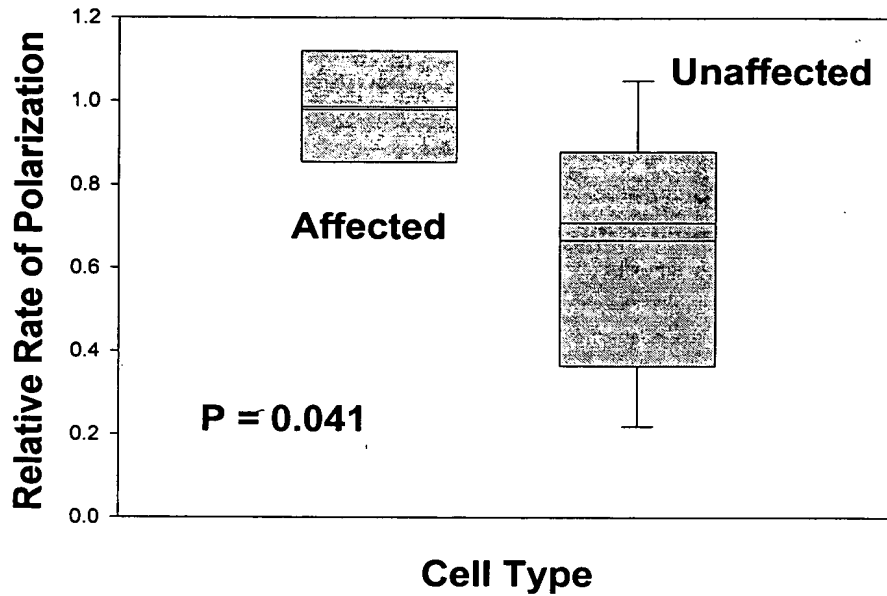
**FIGURE 6**

**Effect of Ethacrynate on Membrane Potential**  
Cells were incubated in  $K^+$  Free Buffer with or without ethacrynate ( $30 \mu M$ ).



**FIGURE 7**

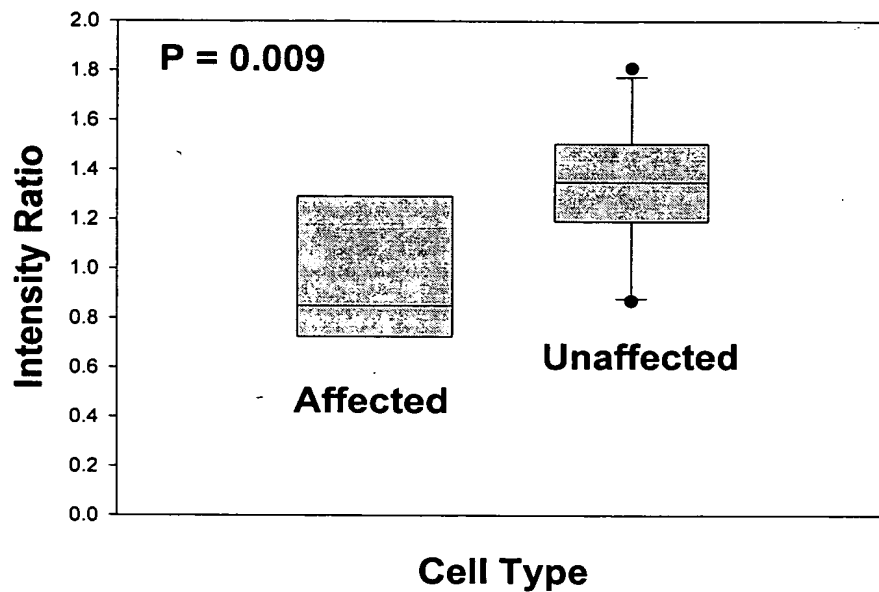
**Relative Rate of Polarization**  
Cells were incubated for 30 min with  
and without ethacrynate in regular buffer  
or in K<sup>+</sup> free buffer.



**Relative Rate of polarization = Polarization Ratio in K<sup>+</sup> Free Buffer /  
Polarization Ratio in Regular Buffer**

**FIGURE 8**

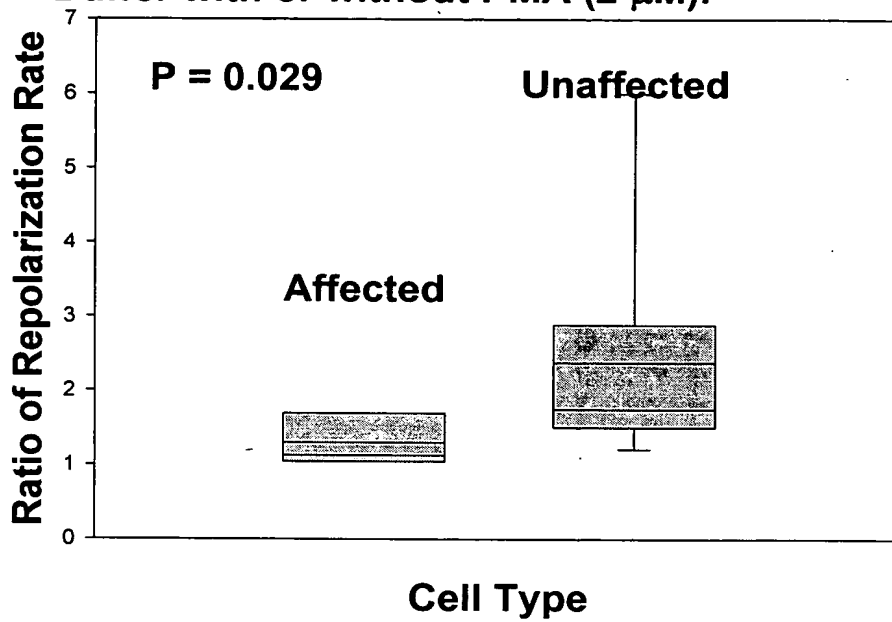
**Effect of Monensin on Membrane Potential**  
Cells were incubated for 30 min in K<sup>+</sup> Free Buffer with or without monensin (10  $\mu$ M).





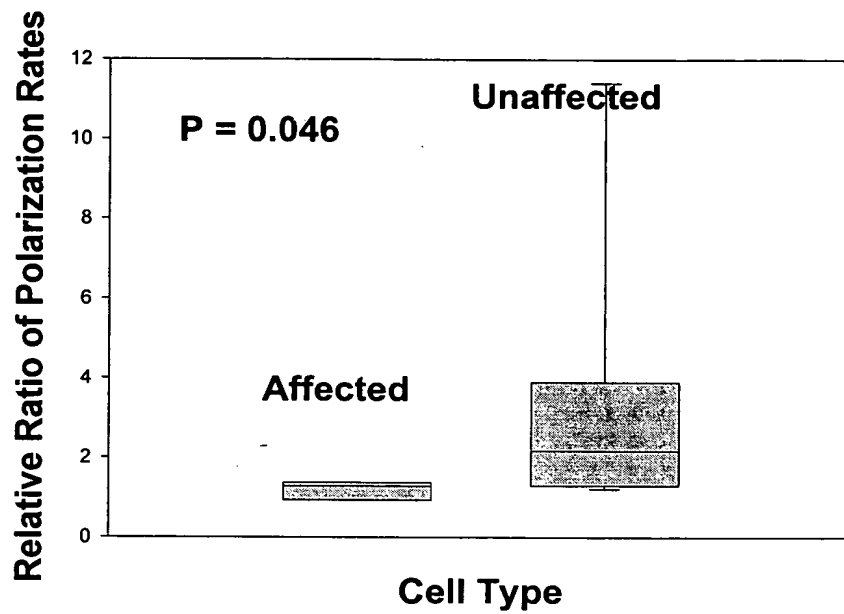
**FIGURE 9**

**Effect of PMA on the rate of repolarization**  
Cells were incubated for 30 min in K<sup>+</sup> Free Buffer with or without PMA (2  $\mu$ M).



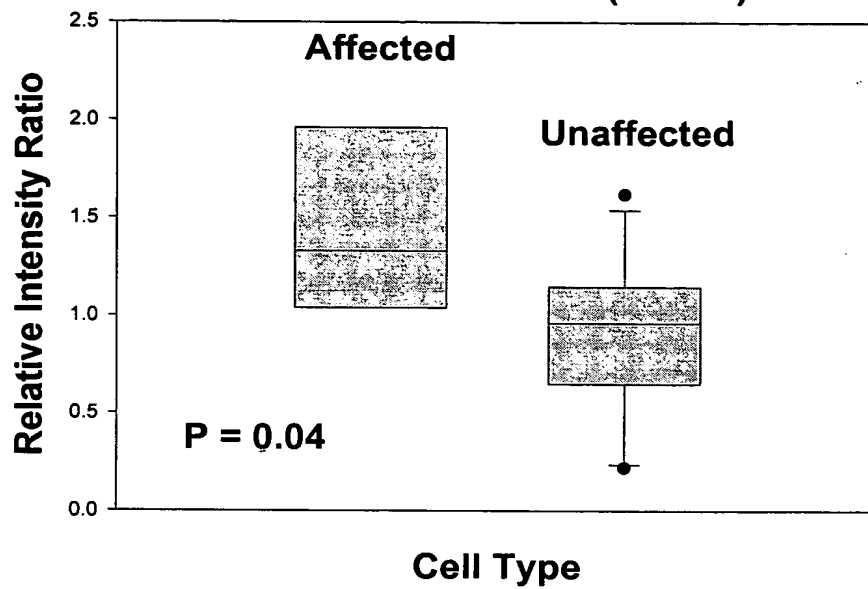
**FIGURE 10**

**Effect of PMA on the Relative Rate of Repolarization**  
Cells were incubated in regular or  $K^+$  free buffers with or without PMA (2  $\mu$ M) for 30 min.



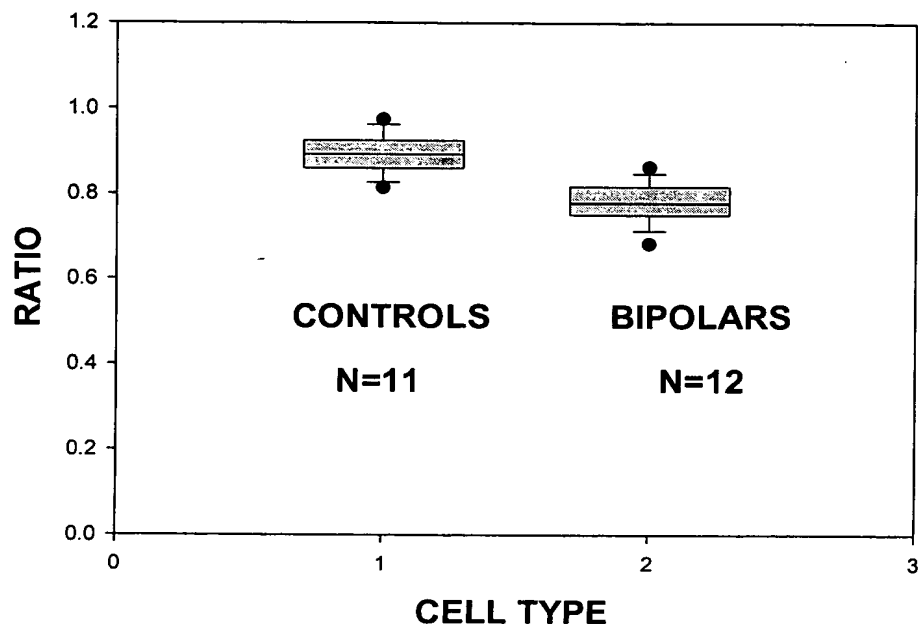
**FIGURE 11**

**Effect of Lithium on Membrane Potential**  
Cells were incubated in Regular or in K<sup>+</sup>Free Buffer for 2 hours with or without LiCl (20 mM).



**FIGURE 12**

**CLINICAL TRIALS (OPEN SAMPLES)  
P<0.001  
WHOLE BLOOD**



**FIGURE 13**

**COMPARISON OF ETHACRYNATE  
AND SORBITOL IN K+FREE BUFFER**

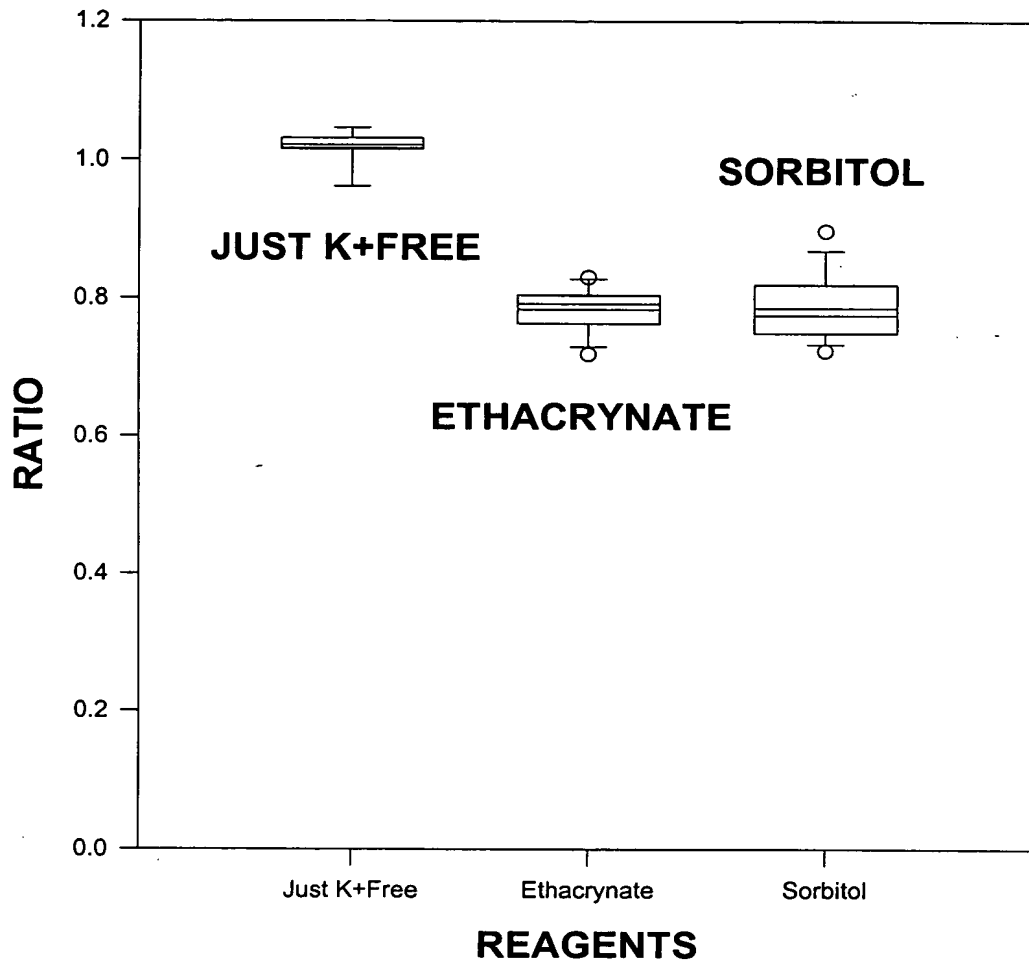
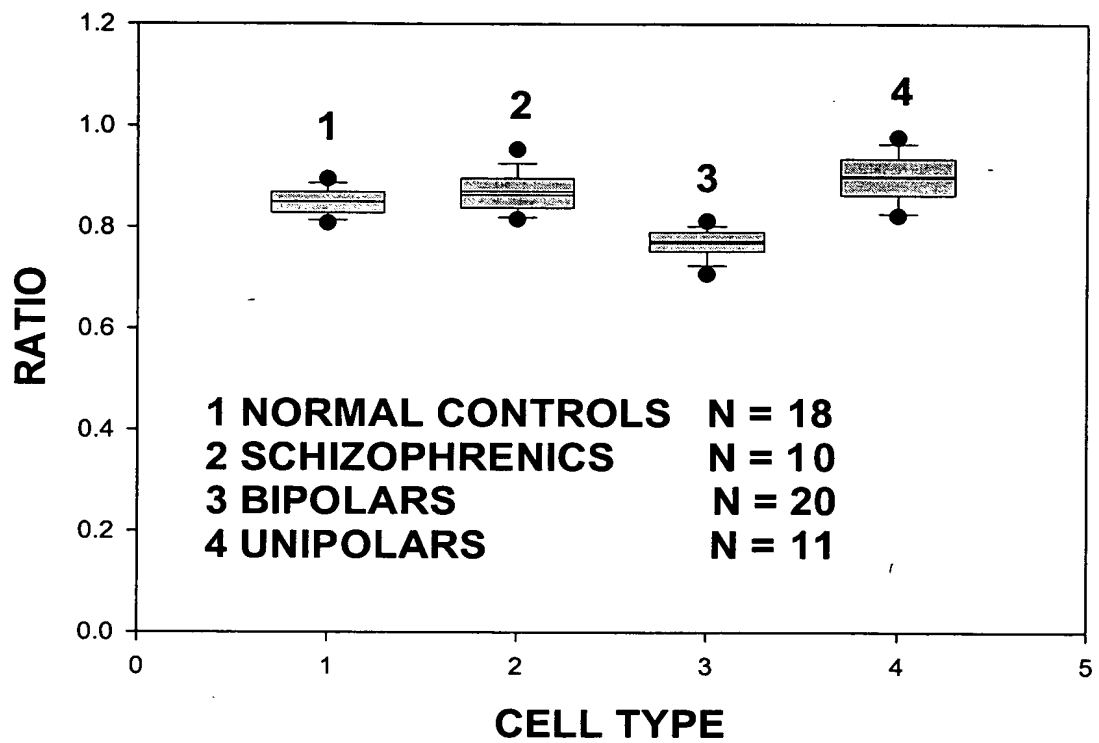


FIGURE 14

**CLINICAL TRIALS  
BLIND WHOLE BLOOD SAMPLES  
 $P < 0.001$**



**FIGURE 15**

**EXAMPLE OF ANOVA TO DIAGNOSE  
A BIPOLAR PATIENT  
PATIENT-A IS BIPOLAR**

